

-continued

	Parts by Weight
Sodium saccharine	0.30
Pyrophosphate	2.00
Hydrated alumina	48.00
Flavor oil	0.95
TCHE	0.30
SLS	2.00

## EXAMPLE 3

Mouthrinse	Parts
Tetrasodium Pyrophosphate	2.00
Gantrez S-97	2.50
Glycerine	10.00
Sodium Fluoride	0.05
Sodium Lauryl Sulfate	0.20
TCHE	0.06
Flavor oil	0.40
Water Q.S. to	100.00

## EXAMPLE 4

## Lozenge

75-80% Sugar  
 1-20% Corn Syrup  
 0.1-1.0 Flavor Oil  
 2% Tetrasodium Pyrophosphate  
 2.50% Gantrez S-97  
 0.01 to 0.05% NaF  
 0.01 to 0.1% TCHE  
 1 to 5% Magnesium Stearate Lubricant  
 0.01 to 0.2% Water

## EXAMPLE 5

Chewing Gum	Parts
Gum Base	25.00
Sorbitol (70%)	17.00
TCHE	0.50 to 0.10
Tetrasodium Pyrophosphate	2.00
Gantrez S.97	2.50

## EXAMPLE 6

Chewing Gum	Parts
Gum Base	30.00
TCHE	0.50
Gantrez	2.00
NaF	0.05
Glycerine	0.50
Crystalline Sorbitol	53.00
Flavor Oil and Water Q.S. to	100.00

In the foregoing Examples improved results are also achievable when TCHE is replaced with each of phenol, 2,2'-methylene bis(4-chloro-6-Bromophenol), eugenol and thymol, and/or when Gantrez is replaced by other AEA's such as Carbopols (e.g. 934), or styrene phosphonic acid polymers having molecular weights within the range of about 3,000 to 10,000 such as poly (beta-styrenephosphonic acid), copolymers of vinyl phosphonic acid with beta-styrenephosphonic acid, and poly (alpha-styrenephosphonic acid), or sulfoacrylic oligomers, or a 1:1 copolymer of maleic anhydride with ethyl acrylate.

This invention has been described with respect to certain preferred embodiments and it will be understood that modifications and variations thereof obvious to those skilled in the art are to be included within the purview of this application and the scope of the appended claims.

We claim:

1. An oral composition comprising an orally acceptable aqueous-humectant dentifrice or toothpaste vehicle, a dentally acceptable water-insoluble polishing agent, a water-soluble or swellable anti-bacterial enhancing agent which is effective to enhance the antibacterial effect of a substantially water-insoluble non-cationic antibacterial agent, which contains at least one delivery-enhancing functional group and at least one organic retention-enhancing group, wherein said delivery-enhancing group enhances delivery of said antibacterial agent to oral tooth and gum surfaces and said retention-enhancing group enhances attachment adherence or bonding of said antibacterial agent on oral tooth and gum surfaces, and an effective anticalculus amount of a linear molecularly dehydrated polyphosphate, wherein the polyphosphate is present in amount such that the weight ratio of polyphosphate ion to antibacterial agent ranges from in excess of 0.72:1 to less than 4:1 said dentifrice or toothpaste having an optimized antiplaque effectiveness by presentation of said non-cationic antibacterial agent in a macroemulsion formed by adding said "A.E.A", or antibacterial enhancing agent incrementally, to a clear solution micro-emulsion of said antibacterial agent typically dissolved in admixtures of humectant and surface active agent, until the solution becomes cloudy, and may be characterized as a macroemulsion.

2. An oral composition comprising an orally acceptable aqueous-humectant dentifrice or toothpaste vehicle, a dentally acceptable water-insoluble polishing agent, a water-insoluble or swellable anti-bacterial enhancing agent which is effective to enhance the antibacterial effect of a substantially water-insoluble non-cationic antibacterial agent, which contains at least one delivery-enhancing functional group and at least one organic retention-enhancing group, wherein said delivery-enhancing group enhances delivery of said antibacterial agent to oral tooth and gum surfaces and said retention-enhancing group enhances attachment, adherence or bonding of said antibacterial agent on oral tooth and gum surfaces, the said composition containing a mixture of potassium and sodium salts at least one of which is present in an effective anticalculus amount as a polyphosphate anticalculus agent, the ratio of potassium to sodium in the said composition being in the range of up to less than 3:1 said dentifrice or toothpaste having an optimized antiplaque effectiveness by presentation of said non-cationic antibacterial agent in a macroemulsion formed by adding said "A.E.A", or antibacterial enhancing agent incrementally, to a clear solution micro-emulsion of said antibacterial agent typically dissolved in admixtures of humectant and surface active agent, until the solution becomes cloudy, and may be characterized as a macroemulsion.

3. An oral composition comprising an orally acceptable aqueous-humectant dentifrice or toothpaste vehicle, a dentally acceptable water-insoluble polishing agent, substantially water insoluble non-cationic antibacterial agent in an amount which retards the oral growth of plaque of from 0.25% to less than 0.5% by weight and a water-soluble or swellable anti-bacterial-